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Cross-National Study of Diagnosis of the Mental Disorders: A Comparison of the Diagnoses of Elderly Psychiatric Patients Admitted to Mental Hospitals serving Queens County, New York, and the former Borough of Camberwell, London

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The original aim of the U.S./U.K. Diagnostic Project, founded in 1965, was to examine differences in the national statistics for the diagnostic frequencies among patients admitted to state mental hospitals in the United States of America and to area mental hospitals in England and Wales.

Attention was focussed first on the younger age groups 19–59 years. Results showed that the high frequency of schizophrenia and the low frequency of affective disorder among mental hospital admissions in New York compared to those in London were due largely to the diagnostic practices of the psychiatrists—the American concept of schizophrenia being more all-embracing than the British (Cooper, J. E., Kendell, R. E., Gurland, B. J., Sharpe, L. Copeland, J. R. M. and Simon, R., 1972). This finding was later confirmed by videotape studies (Kendell, R. E., Cooper, J. E., Gourlay, A. J., Copeland, J. R. M., Sharpe, L. and Gurland, B. J., 1971).

The subject of this paper is the second phase of the study, a comparison of diagnostic frequencies among patients over the age of 65 admitted to state hospitals in both countries, paying particular attention to the high frequency of organic and the low frequency of functional disorders reported among these patients in the U.S. Some preliminary results from the study have already been presented (Copeland *et al.*, 1975).

In his wide survey of the psychogeriatric literature, Ciompi (1966) confirmed that the high mortality rate among the aged in psychiatric hospitals was primarily due to the frequency of senile and arteriosclerotic illness. Post (1951) had found the prognosis for survival among the elderly to be at least twice as good for the functional as for the organic patients, a finding confirmed by Roth and Morrissey (1952) whose patients with affective psychoses, paraphrenia and confusional states had a more favourable outcome than those with senile or arteriosclerotic dementia. These authors stressed the importance for the patient of making the distinction between an organic and a functional diagnosis. Kay (1959) found that the period of survival for hospitalized elderly patients was, in cases of dementia, one-fifth that expected for the average population of the same age and sex, whereas in paranoid states the period of survival was almost normal, and for affective states it was seven-tenths that of the average population.

In the light of these findings, the diagnostic differences which Kramer reported (1961) between hospital admissions for the U.S. and U.K. in this age group assume some importance. Table I shows the hospital admission diagnoses for first admissions of patients over the age of 65, in the U.S. for 1969 and in England and Wales for 1966. Marked differences are still evident. Kramer's question, framed thirteen

TABLE I

Diagnostic breakdown for the major psychiatric categories of first admissions of patients aged 65 and over to U.S. and U.K. State Mental Hospitals

	U.S. 1967 %	England and Wales 1966 %
Functional psychoses		
Affective disorders including depressive neurosis ..	4·9	23·9
Schizophrenia	3·2	5·6
Other psychotic disorders ..	0·4	16·8
Total	8·5	46·3
Organic disorders		
Senile dementia and psychosis with cerebroarteriosclerosis	79·8	42·8
Other diagnoses		
Alcoholism, personality disorders etc.	11·7	10·9
Total	100	100

TABLE II

Death and discharge percentages within one year of admission for patients over the age of 65 admitted to state mental hospitals in the U.S. and U.K.

	13 U.S. states 1960 %	New York State 1968 %	England and Wales 1967 %
Death rate			
Within 3 months of admission	26·1	26·7	13·9
Within 1 year of admission	43·1	43·7	22·1
Discharge rate			
Within 3 months of admission	11·9	11·1	51·3
Within 1 year of admission	21·3	20·1	61·6

years ago (1961) 'to what extent, if at all, are affective psychoses in old age in the U.S. being regarded as organic psychoses? To what extent are valuable treatment opportunities being missed because of this?' remains pertinent. The Project was interested in discovering to what extent it might also apply to the U.K.

Table II shows the death and discharge percentages within one year of admission for patients over the age of 65 as far as it was possible to ascertain them. Those for New York State (1968) are similar to the earlier findings for 13 U.S. states (1960) derived from an unpublished study by the Biometry Department of the National Institute of Mental Health, Washington.

Elderly psychiatric patients admitted to U.S. hospitals appear twice as likely to die in the hospital within one year of admission than are patients admitted to British hospitals. British elderly patients appear three time more likely to be discharged within one year than their U.S. counterparts. These rates are understandable if a large proportion of American admissions in this age group do in fact suffer from organic conditions. However, the prophesy could be self-fulfilling: patients with affective symptoms, if diagnosed as having an organic illness, may not receive appropriate treatment and may die in consequence. Furthermore, since the figures quoted above were obtained there has been much uncertainty in the U.S. over whether to admit to hospital the mentally ill aged if their disease is deemed to be organic in origin and likely to deteriorate or to be 'untreatable'. The label given to the patient may now mean the difference between the patient receiving or not receiving hospital care (*Guidelines for Admission and Referral of Elderly Patients*, New York, 1968).

The need for this study is therefore clear. Are these national diagnostic differences for the elderly due to differences in the patients themselves, perhaps due to real prevalence differences in the community, or to selective procedures for hospital admission, or to different diagnostic criteria and practices among the psychiatrists? Can these diagnostic differences be related to outcome in the two centres?

METHOD

Geographical area

In recent years there has been dispute about which facilities are most suitable for receiving dementing patients. In London an elderly psychiatric patient, especially if he is suffering from dementia, may be sent to a geriatric hospital, which would then remain responsible for him for the rest of his life. In New York this did not appear to be the case. Elderly patients with psychiatric symptoms were often admitted to nursing homes, but they were usually transferred to the psychiatric hospital when the illness became severe. The reason for a low organic rate in London psychiatric hospitals might be due to these patients being diverted to geriatric hospitals; it was therefore decided to take a sample of patients from this source. It was clearly important that the sample admitted to the psychiatric hospital and that to the geriatric hospital should both come from the same catchment area, and so it was decided not to adopt the method of the previous study for the younger age group and compare admissions to particular hospitals, but to compare admissions from a chosen area in each city to the group of hospitals serving that area.

The two areas chosen were Queens County (part of the Borough of Queens) in New York City and the former Borough of Camberwell in London. Both tended to reflect their respective cities for the main demographic variables, had a comparatively stable population and represented a similar wide range of socio-economic groups. The percentage of elderly persons over 65 years of age is approximately 11 per cent in each area.

Queens County is served by an acute psychiatric ward in a general hospital, Elmhurst, situated in the centre of the community. Patients are admitted there for assessment. After an average stay of ten days they are either discharged or transferred to the state mental hospital, Creedmore, located on the outskirts of the city. A small number of patients are admitted directly to Creedmore Hospital.

Camberwell is served by a postgraduate teaching hospital group consisting of the Bethlem Royal Hospital, some six miles away from the local community, the Maudsley Hospital and St. Francis Hospital (the last-named is part of the King's College Hospital teaching group, but the psychiatric wards are staffed by medical personnel from the Maudsley Hospital). The geriatric wards are at St. Francis and are staffed by King's College Hospital staff. Patients admitted to these hospitals tend to remain there throughout their illness unless it proves to be unremitting and chronic, in which case a small number are transferred to the area mental hospital at Cane Hill situated some 12 miles from the community it serves.

Measures used

Each patient was interviewed by a Project psychiatrist using the Geriatric Mental State Schedule (GMS) and a History Schedule. Both are semi-structured interviews developed specially for the Project. The GMS is described in detail elsewhere (Copeland *et al.*, 1975). It has its origin in the 8th edition of the Present State Examination (Wing *et al.*, 1974) and the Mental Status Schedule (Spitzer *et al.*, 1964), both of which were substantially modified for use with elderly subjects. The questions were simplified; the sections covering organic type symptoms were considerably enlarged, while items in other sections less appropriate to the elderly were reduced in number. A series of boxed items were introduced. These briefly cover all the major symptom areas. They are administered first, in case the patient should suffer from fatigue or the interview have to be curtailed for other reasons. These symptoms are later explored at greater length. The interview takes between 20 minutes and one hour to complete. The length of the interview itself did not seem to distress patients. The semi-standardized history schedule was a modification of that used in previous studies. A series of psychological tests were selected and given as a battery by a Project psychologist. As they were intended to validate the psychiatric diagnosis they were kept entirely separate from it, and the findings will be reported elsewhere. Socio-cultural data and data on referral to hospital were collected by the Project social scientists in separate interviews with both patient and an informant.

A test of physical performance and mobility, the 'Activities of Daily Living Performance Test', was also administered. It had been intended to obtain an independent physical assessment of each patient by a consultant geriatrician. This was achieved for the U.S. sample, but only 21 of the Camberwell psychiatric patients and 11 of the geriatric patients were so examined, owing to the departure of one of the Project geriatricians to take up a post elsewhere. For the rest, the physical examination performed by the hospital doctor was used, obtained from the case notes by a research worker without the hospital diagnosis being revealed to the participants in the consensus diagnosis. Comparing the findings of the Project physician and the hospital physician on the samples examined independently, three discrepancies involving physical illness were found, in the two main categories: (a) 'likely to have affected mental state' (psychiatric hospital, one; geriatric hospital, none); (b) 'could have affected the mental state' (psychiatric hospital, one; geriatric hospital, one).

Furthermore, a comparison of the diagnoses made on the Camberwell patients at the initial interview with that made at consensus diagnosis, when additional information including that on physical examination was available, showed that there were no changes from a functional to an organic diagnosis or *vice versa*, tending to confirm the impression of the Project members that the results of the physical examination contributed surprisingly little to the final psychiatric diagnosis.

Sample of patients

A consecutive series of admissions whose home addresses were in the appropriate areas were seen in both countries, 50 to the psychiatric hospitals serving Queens and, in order to allow a comparison to be made between them, 75 admissions to the psychiatric facilities and 75 to the geriatric facilities serving Camberwell.

Each patient was examined within 72 hours of admission, and diagnosis was made according to the 8th edition of the World Health Organization International Classification of Disease, using a draft copy of the new WHO *Glossary of Mental Disorders*. If the patient showed evidence of organic symptoms, the mental state interview was repeated one week later in order to distinguish transient confusional states from more chronic forms of organic illness.

Follow-up

All patients were re-interviewed by each of the three groups of interviewers, psychiatrists, psychologists and social scientists, using all the principal measures, at one month after admission and again at three months after admission, either in hospital or at home if the patients had been discharged. In all, approximately 600 sets of interviews were undertaken.

Consensus diagnosis

Following the initial interviews the Project psychiatrists in each team met with the social scientists, but not the psychologists, and discussed the diagnoses and mental states in the light of the informants' history, the physical examination and biochemical tests and X-rays, reaching a first-stage consensus diagnosis. Such a presentation and discussion might last between 10 and 30 minutes for each case. The Project and hospital diagnoses were kept separate at all stages, and the Project members did not communicate their findings to the hospital staff. An exception to the rule was made in one or two cases where biochemical tests requested by the Project and unknown to the hospital staff showed important abnormalities. After the three-month follow-up the whole team, this time including the psychologist, met again and made the final consensus diagnosis.

RESULTS

Reliability of the geriatric mental state schedule

This will be reported in detail elsewhere (Copeland *et al.*, 1974) and will only be mentioned here. It was important to establish that the schedule could be administered reliably, as there was doubt whether it would be possible to obtain reliable mental state information from the elderly. Both interviewer-observer and following-day repeat interviews were undertaken. The product-moment correlation coefficient between interviewer and observer for the total number of positive ratings was ·87 and for the re-interview comparison ·78. The mean value of the kappa agreement index for all items (Cohen, 1968) was ·73 for interviewer-observer comparison and ·48 for interviewer against re-interviewer, two figures which compare favourably with those obtained by Kendell *et al.* (1971) for the younger age group (19–59 years).

Agreement between project psychiatrists

(a) On diagnosis. In the Camberwell reliability study complete agreement on the ICD sub-category (four-digit category) was recorded between interviewer and observer in 12 of the 20 cases, and agreement on the main ICD category (three-digit category) occurred in 17 cases. The equivalent figures for the interview-re-interview comparison were 11 and 13 of the 20 cases. This agreement was considered good in comparison to other studies of diagnostic reliability.

(b) On the patients' symptoms. The overall mean kappas between the Project psychiatrists interviewing Queens and Camberwell patients were ·72 for Camberwell patients and ·70 for Queens patients. The reliability was considered satisfactory.

Demographic comparison

Table III shows a brief demographic comparison between the 50 Queens and 75 Camberwell psychiatric patients. The Camberwell sample, like the Queens sample, consisted mainly of white persons, but on the whole tended to be a little older, to contain more women and to be of a slightly lower social class than the Queens sample.

Distribution of mental state items between Queens and Camberwell samples

Table IV shows symptoms significantly more common in the Queens patients and a similar list for the Camberwell patients. The most striking difference is simply in the number of symptoms, there being many more for the Camberwell patients. This reflects to some extent the findings in the younger age group. It cannot be assumed, however, that this difference is related simply to a greater severity of illness among the Camberwell patients, because patients who are severely ill are in fact likely to under-report their symptoms, and in this respect the item 'little attention paid to interviewer' is significantly commoner in Queens. However, the differences in the quality of the symptoms are very similar to those found in the younger age group, consistent with the tendency of U.K. hospitals to diagnose more affective illness among both age groups.

TABLE III

Percentage table: Demographic comparison for patients over the age of 65 admitted to psychiatric hospitals in Queens (New York) and Camberwell (London)

	Queens Hospitals patients (N = 50) %	Camberwell Hospitals patients (N = 75) %
Age		
65–74	64	55
75 and over	36	45
Sex		
Female	62	76
Male	38	24
Race		
White	94	100
Non-white	6	0
Social class		
Minor professional ..	16	6
Clerical and sales/ skilled manual ..	28	28
Semi-skilled manual/ unskilled manual/ domestic	38	50
Housewife/unknown..	18	16
Marital status		
Never married ..	14	16
Married now ..	30	31
Other	56	53

Although there is good reliability between the project raters for individual items, some of these differences could still be due to unrecognized differences in rating habits.

Diagnostic distribution

If hospital diagnoses are compared with those for each country as a whole (Table V), it will be seen that neither hospital is as extreme as the national figures for the country in which it is situated. However, the differences between the two hospital diagnoses for Queens and Camberwell are still considerable and significant. 'Other diagnoses' cover personality disorders, alcoholism, various neurotic conditions, and in the U.K. 'paranoid' disorders.

TABLE IV

Distribution of GMSS items for patients over the age of 65 admitted to psychiatric hospitals in Queens (New York) and Camberwell (London)

	Number in Queens N = 48*	Number in Camberwell N = 75	P<
Items more common in Queens			
Foreign language	12	1	·001
Unshaven, nose running, face dirty	9	2	·01
Pays little or no attention to interviewer	7	0	·01
Either interviewer and/or interviewee had difficulty understanding each other	31	31	·02
Puzzled or bewildered expression or response	10	5	·05
Patient does not reply to any question in interview	4	0	·05
Items more common in Camberwell			
'Near misses' a feature of errors	0	18	·001
Interview incomplete owing to patient's illness or frailty	0	13	·01
Overall severity rating of impairment of body and object recognition	22	54	·01
Overall severity rating of subjective slowness	13	40	·01
Bland, indifferent or euphoric O/E	2	16	·02
Organic defect in clear consciousness	10	34	·02
Looks frail O/E	7	27	·02
Overall severity of situational anxiety	3	18	·05
Avoidance of crowds, bus routes etc.	0	10	·05
Avoidance of particular situations, unspecified	2	14	·05
Presence of some form of situational anxiety	3	17	·05
Overall rating on severity of eating or sleep disturbance	16	42	·05
Patient's subjective feeling of sleep disturbance	11	34	·05
Difficulty in concentrating on reading	4	18	·05
Overall severity of subjective irritability	9	29	·05
Things going too quickly for him	3	17	·05
Overall severity of depression	13	37	·05
Despondent posture O/E	3	16	·05
Looks sad, or mournful, or depressed O/E	13	37	·05
Has felt that life was not worth living	6	24	·05

* Two patients were uninterviewable.

TABLE V

***Percentage table.** Comparison of diagnostic frequencies for patients over the age of 65 admitted to psychiatric hospitals in Queens County (New York) and Camberwell (London) compared with U.S. and England and Wales*

	U.S. 1969 All admissions %	Queens hospitals (New York) %	Camberwell hospitals (London) %	England and Wales 1966 All admissions %
Organic	51·0	66·0	38·6	35·0
Affective	26·0	20·0	37·0	34·0
Schizophrenic	5·0	10·0	13·0	8·0
Others	18·0	4·0	11·0	23·0
Total	100·0	100·0	100·0	100·0

TABLE VI

Comparison of one-month Project consensus and hospital diagnoses for patients over the age of 65 admitted to psychiatric hospitals serving Queens (New York) and Camberwell (London)

	Queens hospitals patients				Camberwell hospitals patients			
	Hospital diagnoses		Project diagnoses		Project diagnoses		Hospital diagnoses	
	No.	%	No.	%	No.	%	No.	%
Organic	33	66·0	23	46·0	29	38·7	29	38·7
Affective	10	20·0	16	32·0	29	38·7	28	37·3
Schizophrenic ..	5	10·0	7	14·0	14	18·6	10	13·3
Other	2	4·0	4	8·0	3	4·0	8	10·7
Total	50	100·0	50	100·0	75	100·0	75	100·0

Table VI shows the comparison of Project diagnoses on the same patients. There is a tendency for there to be more organic cases in the Queens sample than in the Camberwell sample, but the differences are not significant.

As already mentioned, a sample of patients in the geriatric facilities at St. Francis Hospital were seen because it was thought that a number of psychiatric patients might have been admitted to these, who, if they had been in New York, would have been admitted to the psychiatric wards. Adding the geriatric to the psychiatric sample in the U.K. cannot produce a group of patients entirely comparable to the U.S. patients, because the degree of associated physical illness in the Queens hospitals, though higher than in the Camberwell psychiatric hospitals, was almost certainly lower than in the Camberwell psychiatric and geriatric samples combined. However, it is remarkable how close the diagnostic frequencies of the two sides become when this combined sample is compared to the Queens sample (Table VII). This comparison tends to confirm the early suspicions derived from the preliminary surveys that some patients with psychiatric conditions of organic origin are accepted by the geriatric hospital in London, and thus further underlines the importance of prevalence studies based on community samples.

TABLE VII

Percentage table. All Camberwell geriatric patients with psychiatric diagnoses (including those in the geriatric wards), compared with Queens psychiatric patients

	Queens hospitals Project diagnoses (Psychiatric hospitals) N = 50		Camberwell hospitals Project diagnoses (Psychiatric and geriatric hospitals) N = 123	
	No.	%	%	No.
Organics ..	23	46·0	52·8	65
Affective ..	16	32·0	32·5	40
Schizophrenics	7	14·0	11·4	14
Others ..	4	8·0	3·3	4

Validity of the Project diagnosis

The follow-up study on the patients described in this paper is reported elsewhere (Gurland *et al.*, 1975). However, Fig. 1 has been included in order to provide evidence of the validity of the initial Project diagnoses. The most difficult and perhaps the most important diagnostic distinction to make for patients of this age group is that between affective disorders and dementia. If the Project members could make this distinction satisfactorily it might be assumed that the other Project diagnoses would reach at least equal validity. For each of the section scores representing four symptoms (depression, impaired memory, aphasia, including body and object recognition, and disorientation), four standardized scores were calculated from the means of the two groups (dementias and affectives, 17 and 26 patients respectively following the exclusion of those who died during the first three months) for the two interview times (initial and three months).

Both groups of data are shown in Fig. 1. It will be seen that at initial interview the mean profiles for affective disorder and dementia are quite different.

For the affective disorders, the levels of depression are high, while the levels of the organic symptoms, impaired memory, aphasia etc. and disorientation are low; the opposite is true for dementia. Disorientation shows the greatest difference between the two diagnoses ($p < \cdot 001$) and impaired memory the least ($p < \cdot 01$). When the profile for the affective disorders at the three-month interview is compared with the profile for the initial interview, a fall can be seen in the levels of all symptoms except disorientation, which had the lowest score of the four at initial interview. The fall in the levels of depressive mood and impaired memory is significant at $p < \cdot 02$ and $p < \cdot 05$ respectively. A similar comparison for dementia, however, shows a fall in the level of aphasia but little change in the other scores, none being significant. These findings would seem to indicate that disorientation, when present, is one of the best symptoms for discriminating between affective disorder and dementia in this age group and that impaired memory, which occurs in both conditions, is the symptom most likely to cause diagnostic confusion. It is this last symptom, of the three organic symptoms chosen, which shows the greatest improvement for the affective group three months after admission, while for the demented group no improvement is observed. At both the one-year and the two-year follow-up of these groups the death rates were much the same; this was expected, since few of the demented patients were severely ill. However, during the first year 83 per cent of the patients with affective disorders were discharged from hospital at least once during the year, compared with only 35 per cent of demented patients. The mean number of days spent in hospital for the patients with affective disorders still alive at two years was 266, while the mean for the demented patients was 597 ($p < \cdot 002$). These results provide some evidence for the validity of the Project diagnosis, at least for affective disorders and dementia.

Discussion

Overall, the diagnostic differences reflected in the hospital diagnoses in Queens and Cam-

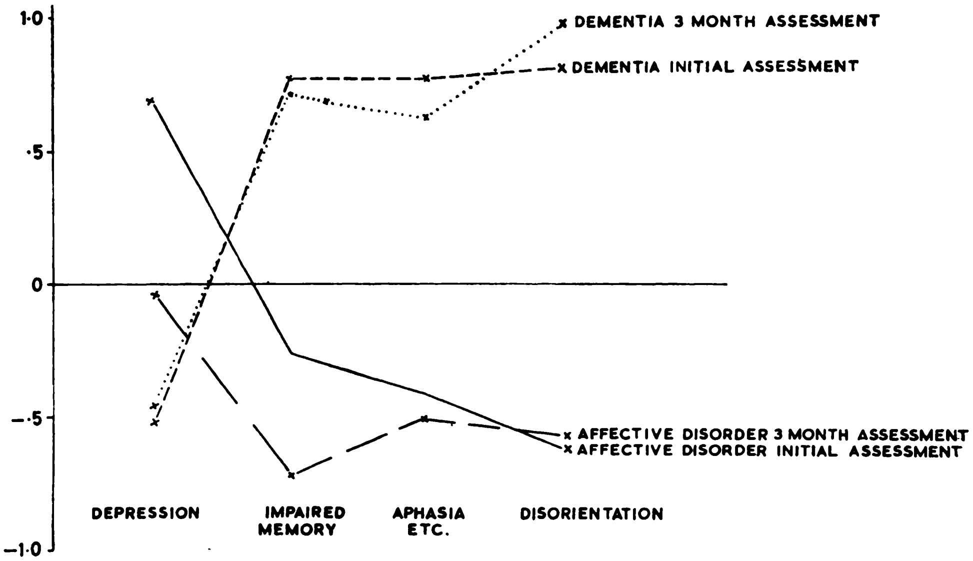

Fig. 1.—Simplified symptom profiles of standardized section scores of patients with affective disorder (N = 26) and dementia (N = 17) at initial and 3 month assessments.

berwell are greatly diminished when the Project diagnosis is used as a reliable yardstick with which to compare the two groups of patients. There is a slight tendency for the Project to make more organic diagnoses in the Queens psychiatric hospitals, but if the geriatric patients in Camberwell are added to the psychiatric sample the tendency is reversed.

This small difference probably arises from local hospital admission policies.

The results of this study are similar to those of the cross-national study of the younger patients aged 19–59 (Cooper *et al.*, 1972). Differences in diagnostic frequencies for elderly patients between areas of New York and London seem to be due to different diagnostic criteria employed by the psychiatrists rather than to the behavioural characteristics of the patients themselves. The Diagnostic Project has never claimed that its own diagnostic criteria are infallible, only that they are based on the preliminary version of the WHO *Glossary of Mental Disorders* and can be shown to be reliable between its own raters.

The Project psychiatrists working in Camberwell agreed more closely with the Camberwell psychiatrists on the diagnoses they gave to the patients than did the Project psychiatrists working in Queens with the Queens psychiatrists. In all, the Project psychiatrists working in Queens made significantly less organic diagnoses than the Queens psychiatrists ($p < \cdot 01$).

The authors have shown that the discrepancy in the diagnostic frequencies for elderly patients admitted to the two hospitals in Camberwell and Queens is consistent with the even greater discrepancy between the national statistics for their respective countries. If the study results can be generalized to a wider area—and it will be remembered that the results for the single hospital studies for the younger age group closely resembled those for the metropolitan areas of New York and London as a whole (Cooper *et al.*, 1972)—then it could follow that many elderly patients are being given organic diagnoses in parts of the U.S. whom the Project and U.K. psychiatrists would consider to be functional. Only a follow-up study can reveal which is the more useful diagnosis for deciding treatment and for predicting prognosis. Nevertheless, it is likely that psychiatrists as a whole show less therapeutic enthusiasm for elderly patients with organic diagnoses than for those diagnosed as having a functional illness. In this respect, can U.S. psychiatrists be sure that 'valuable treatment opportunities' are not being missed? On the one hand, important though the schizophrenic controversy (examined in our previous studies) is, especially for the treatment of affective illness in the younger age group, it rests on matters of definition which can only be resolved at present by mutual agreement. The organic diagnosis, on the other hand, should be less uncertain, since the diagnostic criteria are more clear, the final appeal to pathology much easier and the implications for treatment and prognosis more serious.

The follow-up of these patients is also being reported.

SUMMARY

A consecutive series of 75 patients over the age of 65 admitted to psychiatric hospitals serving Camberwell, London, was compared with a similar series of 50 patients admitted to psychiatric hospitals serving Queens County, New York City, in order to examine the reported preponderance of organic diagnoses made in New York among patients of this age group. A special schedule for mental state was developed for the aged, and satisfactory reliability for the items of this schedule was shown between the two teams. Psychological and social measures were also taken (to be reported elsewhere), and physical examinations were undertaken on a proportion of patients, including laboratory tests and X-rays. Patients were examined shortly after admission and one month and three months later, using all the measures, either in the hospital or at home in the community. Results showed that, while the hospitals' diagnosis in Camberwell and Queens on the patients examined differed as expected according to the national statistics, there were no significant differences in the diagnostic proportions found by the Project on either side. Agreement between Project and hospital in Camberwell was good, while that between Project and hospital in Queens showed a signi-

ficant difference for the organic patients. A tendency for the Project to diagnose more organic patients in Queens than in Camberwell was not significant. When a sample of patients examined in a similar manner in the Camberwell geriatric hospitals and considered as mentally ill by the Project was added to the psychiatric hospital patients, the tendency for there to be a higher proportion of organic patients in the Queens hospitals disappeared. This suggests that in Camberwell, some psychiatric cases of organic origin were being admitted to the geriatric hospitals.

Some evidence is produced for the validity of the Project diagnosis for depression and dementia, in terms of symptom profiles, discharge rates and days spent in hospital. Disorientation is the symptom likely to distinguish most clearly between dementia and depression, and poor memory that most likely to cause confusion; in affective patients, poor memory was in fact the organic symptom most likely to show improvement at follow-up.

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